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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,717	12/19/2001	David J. Doddek	01-575	8006
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CATERPILLAR INC. 100 N.E. ADAMS STREET PATENT DEPT. PEORIA, IL 616296490			EXAMINER BHAT, ADITYA S	
			ART UNIT	PAPER NUMBER
			2863	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/18/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/025,717

Applicant(s)

DODDEK ET AL.

Examiner

Aditya S. Bhat

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16-26, 28 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-26, 28 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14, 16-26, and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pillar (USPN 6,553,290) in view of Rother (USPN 6,141,608).

With regard to Claim 1, Pillar (USPN 6,553,290) teaches a method for analyzing machine data, the machine data representing at least one condition of a machine, comprising the steps of:

storing said machine data in a data system; (Col. 7, lines 22-25)

defining a first testing procedure from a plurality of pre-defined owner input each associated with one or more diagnostic processes, wherein at least one of the owner inputs is associated with one or more diagnostic processes(col. 10, lines 58-65) that are different from the one or more diagnostic processes with which at least one of the other owner inputs is associated; (Col.7-8, lines 60-67 & 1-67)

processing said machine data based on said testing procedure to determine a machine exception, (Col. 5, lines 5-15)and generating a notification in the event of a machine exception. (Col.11, lines 50-52)

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With regard to Claim 2, Pillar (USPN 6,553,290) teaches selecting a test and defined parameters for said test. (Col.8 lines21-67, col.9-10, lines 1-67 & 1-40)

With regard to Claim 3, Pillar (USPN 6,553,290) teaches notification is relayed to a notification device. (Col.11, lines 50-52)

With regard to Claim 4, and 13 Pillar (USPN 6,553,290) teaches notification device is a hand held communications device. (33;figure 2)

With regard to Claim 5, Pillar (USPN 6,553,290) teaches procedure is run on a sequencer. (33;figure 2)

With regard to Claim 6, Pillar (USPN 6,553,290) teaches storing said machine data on said machine in packets; and transferring said packets via a communications network to said data system. (33,36; See figure 2)

With regard to Claim 7, Pillar (USPN 6,553,290) teaches streaming said machine data from said machine to said data system via a communications network. 36;figure 2)

With regard to Claim 8, Pillar (USPN 6,553,290) teaches a system for analyzing machine data, the machine data representing at least one condition of a machine, comprising:

a data system configured to store machine data; (Col. 7, lines 22-25)

an owner input device configured to accept a plurality of different owner inputs, each associated with one or more diagnostic processes (col. 10, lines 58-65), wherein at least one of the owner inputs is associated with one or more diagnostic processes

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that are different from the one or more diagnostic processes with which at least one of the owner inputs is associated; (Col.7-8, lines 60-67 & 1-67) and

an analyzer configured to accept a procedure selected by an owner, from said plurality of owner inputs, said analyzer configured to process said machine data based upon said procedure to determine a machine exception and generate a notification in the event of a machine exception (Col. 5, lines 5-15) (Col.11, lines 50-52)

With regard to Claim 9 and 22, Pillar (USPN 6,553,290) teaches a communications network for relaying said machine data from said machine to said data system. (36; see figure 2)

With regard to Claim 10, Pillar (USPN 6,553,290) teaches a communications network comprises wireless communication means. (Col.6, lines 44-53)

With regard to Claim 11, Pillar (USPN 6,553,290) teaches a procedure comprises a test selected by said owner and at least one parameter defined by said owner and associated with said test. (Col.8 lines21-67, col.9-10, lines 1-67 & 1-40) (Col. 10,lines 58-65)

With regard to Claim 12, Pillar (USPN 6,553,290) teaches a notification device for receiving said notification via said communications network. (figure 3)

With regard to Claim 14, Pillar (USPN 6,553,290) teaches a method for analyzing machine data, the machine data representing at least one condition of a machine, comprising the steps of:

storing said machine data in a data system; (Col. 2, lines 12-14)

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defining at least one testing procedure by selecting from a plurality of owner inputs, each associated with one or more diagnostic processes to be associated with said machine data, wherein at least one of the owner inputs is associated with one or more diagnostic processes that are different from the one or more diagnostic processes with which at least one of the owner inputs is associated; (Col.8 lines 21-67, col.9-10, lines 1-67 & 1-40) (Col. 10,lines 58-65)

processing said machine data based upon said procedure (Col. 5, lines 5-15)

determining a machine exception from said procedure; (Col. 6, lines 54-56) and

generating a report in the event of said machine exception. (Col.11, lines 50-52)

wherein said defining step includes the steps of:

selecting at least one test to be associated with said machine data; (Col. 10,lines 58-65)

defining at least one parameter associated with said at least one test; (Col.8 lines 21-67, col.9-10, lines 1-67 & 1-40)

defining at least two limits for at least one parameter, wherein machine data that exceeds at least one of the limits is considered a machine exception; (Col.8 lines 21-67, col.9-10, lines 1-67 & 1-40) (see measurement range portion of chart) and

wherein said process step includes running said at least one test in relation to said machine data (col. 10, lines 40-45)

With regard to Claim 16 Pillar (USPN 6,553,290) teaches an analyzer based upon said procedure, which is defined by said owner, performs processing step. (Col.8 lines 21-67, col.9-10, lines 1-67 & 1-40) (Col. 10,lines 58-65) (15;figure 2)

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With regard to Claim 17, Pillar (USPN 6,553,290) teaches a system for analyzing machine data, the machine data representing at least one condition of a machine, comprising:

- a data system configured to store machine data; (Col. 7, lines 22-25) and
- an owner input device configured to accept a plurality of different owner inputs, each associated with one or more diagnostic processes, wherein at least one of the owner inputs is associated with one or more diagnostic processes that are different from the one or more diagnostic processes with which at least one of the owner inputs is associated; (Col.7-8, lines 60-67 & 1-67) (Col.8 lines 21-67, col.9-10, lines 1-67 & 1-40) (Col. 10,lines 58-65)

- wherein the owner input device is configured to accept owner input to:

- select at least one test to be associated with said machine data; ((Col. 10,lines 58-65)

- define at least one parameter associated with said at least one test; Col.8 lines 21-67, col.9-10, lines 1-67 & 1-40)

- define at least two limits for at least one parameter, wherein machine data that exceeds at least one of the limits is considered a machine exception; (Col.8 lines 21-67, col.9-10, lines 1-67 & 1-40) (see measurement range portion of chart) and

- an analyzer configured to accept a procedure selected by an owner, from said plurality of owner inputs, said analyzer configured to process said machine data based upon said procedure to determine a machine exception (Col. 5, lines 5-15) (Col.11, lines

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50-52) and generate a notification in the event of a machine exception (Col.11, lines 50-52) and

said analyzer generating a report in the event of said machine exception. (Col.11, lines 50-52)

With regard to Claim 18, Pillar (USPN 6,553,290) teaches: a communications network for relaying said machine data from said machine to said data system. (36;see figure 2)

With regard to Claim 19, Pillar (USPN 6,553,290) teaches the procedure is comprised of at least one test selected by said owner, said test having at least one associated parameter defined by said owner. (Col.8 lines 21-67, col.9-10, lines 1-67 & 1-40) (Col. 10,lines 58-65)

With regard to Claim 20, Pillar (USPN 6,553,290) teaches a method for providing an exception-based report, said report based on machine data representing at least one condition of a machine, comprising the steps of:

analyzing one or more sets of machine data based on prior input made on board the machine by an owner selecting a testing procedure for generating said one or more sets of machine data, (Col.10, lines 58-65) wherein the prior input includes defining a testing procedure by selecting from a plurality of predefined each associated with one or more diagnostic processes, wherein at least one of the owner inputs is associated with one or more diagnostic processes that are different from the one or more diagnostic processes with which at least one of the owner inputs is associated; (Col.8 lines 21-67, col.9-10, lines 1-67 & 1-40)

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checking for machine exceptions in said machine data; and (Col.8 lines 21-67, col.9-10, lines 1-67 & 1-40)

generating a report in the event of said machine exception. (Col.10, lines 48-57)

With regard to Claim 21, Pillar (USPN 6,553,290) teaches an exception alert and wherein said alert is relayed to a notification device. (Col.11, lines 50-52)

With regard to Claim 23, Pillar (USPN 6,553,290) teaches system for providing an exception-based report, said report based on machine data representing at least one condition of a machine, comprising:

an owner input device located on board the machine and configured to accept a plurality of different owner inputs, (20;figure 2) each associated with one or more diagnostic processes, wherein at least one of the owner inputs is associated with one or more diagnostic processes that are different from the one or more diagnostic processes with which at least one of the owner inputs is associated; (Col.8 lines 21-67, col.9-10, lines 1-67 & 1-40) and

an analyzer (15;figure 2) configured to process one or more distinct sets of machine data based upon prior selection of at least one of said plurality of different owner inputs by an owner, (Col.8 lines 21-67, col.9-10, lines 1-67 & 1-40)

said analyzer configured to check for machine exception in said machine data, (Col. 6, lines 54-60)

said analyzer configured to generate a report in the event of a machine exception and a notification device for receiving said report. (Col. 11, lines 50-52)

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With regard to Claim 24, Pillar (USPN 6,553,290) teaches report comprises an exception alert and wherein said notification device is a portable communications device.

With regard to Claim 25, Pillar (USPN 6,553,290) teaches a communications network (36;figure 2) for wirelessly relaying said report to said notification device. (Col. 11, lines 51-52)

With regard to Claim 26, Pillar (USPN 6,553,290) teaches a data system for storing said machine data; and wherein said communications device relays said machine data from said machine to said data system. (See figure 2)

With regards to claim 28 Pillar (USPN 6,553,290) teaches one or more sets of machine data includes data from another machine. (Col.8 lines 21-67, col.9-10, lines 1-67 & 1-40)

With regards to claim 29 Pillar (USPN 6,553,290) one or more distinct sets of machine data, which the analyzer is configured to process, includes data from another machine. (Col.8 lines 21-67, col.9-10, lines 1-67 & 1-40)

Pillar does not appear to teach defining the test procedure includes conditioning at least one diagnostic process to execute automatically based on the results of at least one other diagnostic process.

Rother teaches defining the test procedure includes conditioning at least one diagnostic process to execute automatically based on the results of at least one other diagnostic process.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Pillar reference to include defining the test procedure includes conditioning at least one diagnostic process to execute automatically based on the results of at least one other diagnostic process (col.1, lines 45-51) taught by Rother in order to guide the user in the selection of test to be performed and minimize the performance of needless tests. (col. 2, lines 4-6)

Response to Amendment

Applicant's arguments with respect to claims 1-14, 16-26, and 28-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hanson et al. (USPN 6,954,689) teaches a method and apparatus for monitoring work vehicles


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aditya S Bhat whose telephone number is 703-308-0332. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 703-308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5841 for regular communications and 703-308-5841 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Aditya S. Bhat
December 6, 2006



John Barlow
Supervisory Patent Examiner
Technology Center 2800